

In the Claims:

Please amend the claims as shown in the following listing of claims, which will replace all prior versions and listings of claims in the application.

1-16. (Canceled)

17. (New) A transgenic non-human animal having germ and/or somatic cells which comprise a DNA construct comprising a cDNA molecule coding for N- and C-terminally truncated tau molecules, wherein:

the molecules have truncated at least 30 nucleotides downstream of the start codon and truncated at least the 30 nucleotides upstream of the stop codon of the full length tau cDNA sequence coding for 4-repeat and 3-repeat tau protein, respectively, as given in Seq. accession number NM_173727 in GeneBank;

the minimally truncated tau core encompasses a protein fragment which is encoded by nucleotides nr 744 - 930 (SEQ ID No. 9; numbered according to tau protein isoform 43); and

the DNA construct encodes a protein, which has neurofibrillary (NF) pathology producing activity when expressed in brain cells of animals.

18. (New) The transgenic non-human animal of claim 17, further defined as an animal with germ and somatic cells transiently or stably expressing said DNA construct and exhibiting NF pathology in the brain.

19. (New) The transgenic non-human animal of claim 17, further defined as a rat.

20. (New) The transgenic non-human animal of claim 17, wherein the protein encoded by said DNA molecules is expressed in the brain.

21. (New) The transgenic non-human animal of claim 17, further defined as exhibiting NF pathology and having a genetic background allowing the induction of risk factors associated with Alzheimer's disease.

22. (New) The transgenic non-human animal of claim 21, further defined as inducible to exhibit hypertension.

23. (New) The transgenic non-human animal of claim 21, further defined as inducible to exhibit diabetes.

24. (New) The transgenic non-human animal of claim 21, further defined as inducible to exhibit hypercholesterolemia.
25. (New) A screening assay system and validation system for a candidate for the treatment, prevention, and/or diagnosis of a tauopathy comprising:
evaluating the candidate by:
detecting changes of neurofibrillar pathology in a non-human transgenic animal of claim 17;
measuring of neurobehavioral changes in said animal;
measuring of the cognitive score in said animal;
validating the candidate for the treatment and prevention of the tauopathy;
validating diagnostic markers and probes for the detection the tauopathy; and
validating the candidate for the treatment of hypertension, diabetes, dislipidaemia and/or hypercholesterolemia in combination with the tauopathy.
26. (New) The system of claim 25, wherein the tauopathy is Alzheimer's disease.
27. (New) The system of claim 25, further defined as a system for identifying new drug targets in tauopathies and related neurodegeneration processes.
28. (New) A method comprising assaying the efficacy of substances or therapies using an animal according to claim 17.
29. (New) The method of claim 28, further defined as a method for assaying the efficacy of neurofibrillary pathology reducing therapies.
30. (New) The method of claim 28, wherein said substances or therapies are for neurodegenerative diseases.
31. (New) The method of claim 30, wherein said substances or therapies are for a tauopathy.
32. (New) The method of claim 31, wherein said substances or therapies are for a neurodegenerative disease accompanied by neurofibrillary pathology.
33. (New) The method of claim 32, wherein said substances or therapies are for Alzheimer's disease.